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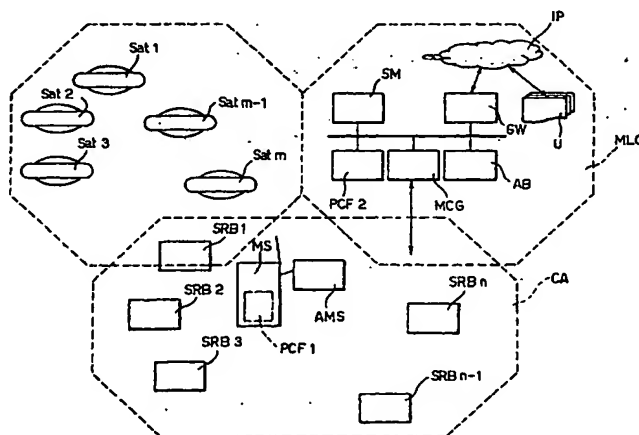
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(54) Title: A METHOD FOR THE LOCATION OF MOBILE TERMINALS, RELATED SYSTEMS AND TERMINAL, COMPUTER PROGRAM PRODUCTS THEREOF



(57) Abstract: A method for determining the location coordinates (x, y, z) of a mobile terminal (MS) with respect to reference elements (SRB1, ..., SRBn; Sat1, ..., Satm) adapted to send towards said mobile terminal (MS) radioelectric signals involves the steps of measuring the radioelectric signals to derive respective measurements (τ_k), said measurements (τ_k) being affected by measurement errors, and subjecting the measurements (τ_k) to state-based statistical filtering ($x_{k+1}, y_{k+1}, z_{k+1}$), such as a kalman filtering, to derive therefrom the location coordinates of the mobile terminal. At least some of the reference elements are terrestrial reference elements (SRB1, ..., SRBn) and in the statistical filtering at least one further state (t_k) is included in addition to the coordinates. The further state (t_k) is representative of the measurement errors. The terminal is adapted to be mounted on a vehicle such as a motorcar and to have associated therewith measurement source such as an altimeter adapted to provide additional measurements indicative of the location (e.g. the altitude) and/or the displacement of the mobile terminal (MS).



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